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| 10/581,124   | 05/31/2006  | Ulrike Licht         | 290762US0X PCT      | 1757             |
| 22850  | 7590        | 06/17/2009           |                     |                  |
| OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.<br>1940 DUKE STREET<br>ALEXANDRIA, VA 22314 |             |                      |                     |                  |
| EXAMINER   |             |                      |                     |                  |
| NILAND, PATRICK DENNIS   |             |                      |                     |                  |
| ART UNIT   |             | PAPER NUMBER         |                     |                  |
| 1796   |             |                      |                     |                  |
| NOTIFICATION DATE  |             | DELIVERY MODE        |                     |                  |
| 06/17/2009   |             | ELECTRONIC           |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/581,124

**Applicant(s)**

LICHT ET AL.

**Examiner**

Patrick D. Niland

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF 298)  
Paper No(s)/Mail Date 10/30/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-9, 11-18, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. It is unclear what is intended by “miniemulsion” of the instant claims 1-9, 11-18, and 20 . The preferred and claimed particle sizes are noted, e.g. page 2, line 40 and the instant claim 19 of the instant specification. However, these sizes are “preferred” and not limiting, except in the claims that recite them. It is unclear what the full scope of “miniemulsion” is intended to be.

B. The instant claim 6 refers to polymeric molecular weights simply as “molecular weight”. It is unclear what is intended by these polymeric molecular weights, e.g. number average, weight average, viscosity average, z average, etc.. These basis polymeric molecular weight concepts are explained in basic polymer texts.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 5612406 Frings et al..

Frings discloses an aqueous dispersion of polyurethane/acrylic block copolymer made by the instantly claimed process using the instantly claimed functional initiators, where the higher hydrophilic content and solubility described by the reference implies the instantly claimed “miniemulsion”/particle sizes for the more hydrophilic/more soluble blocks necessarily because the more hydrophilic/more soluble blocks are known/expected to possess smaller particle sizes within the scope of the instantly claimed “miniemulsion”/particle sizes. See the abstract; column 1, lines 14-67; column 2, lines 1-67, particularly 30-40, noting lines 33-35, and lines 45-67; column 3, lines 1-67, particularly 31-34, which falls within the scope of the instant claim 4 amounts, 55-67; column 4, lines 1-67, particularly 27-67; column 5, lines 1-67, particularly 50-67; column 6, lines 1-67, particularly lines 33-41, noting “water-soluble”, column 7, lines 1-67, particularly 41-46; column 8, lines 1-67, particularly 10-17; claims 1-2; and the remainder of the document. The molecular weights of the disclosed diisocyanates and those of column 3, lines 1-13 encompass the molecular weights of the instant claim 6 for some type of average molecular weight. The hydroxyl acrylates are the instantly claimed component c, which coupled with the disclosed acrylic acids are the instantly claimed component d.

6. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 5612406 Frings et al..

Frings discloses an aqueous dispersion of polyurethane/acrylic block copolymer made by the instantly claimed processes using the instantly claimed functional initiators, where the higher hydrophile content and solubility described by the reference implies the instantly claimed “miniemulsion”/particle sizes for the more hydrophilic/more soluble blocks necessarily because the more hydrophilic/more soluble blocks are known/expected to possess smaller particle sizes within the scope of the instantly claimed “miniemulsion”/particle sizes. See the abstract; column 1, lines 14-67; column 2, lines 1-67, particularly 30-40, noting lines 33-35, and lines 45-67; column 3, lines 1-67, particularly 31-34, which falls within the scope of the instant claim 4 amounts, 55-67; column 4, lines 1-67, particularly 27-67; column 5, lines 1-67, particularly 50-67; column 6, lines 1-67, particularly lines 33-41, noting “water-soluble”, column 7, lines 1-67, particularly 41-46; column 8, lines 1-67, particularly 10-17; claims 1-2; and the remainder of the document. The molecular weights of the disclosed diisocyanates and those of column 3, lines 1-13 encompass the molecular weights of the instant claim 6 for some type of average molecular weight. The hydroxyl acrylates are the instantly claimed component e, which coupled with the disclosed acrylic acids are the instantly claimed component d.

It would have been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to use the instantly claimed combinations of ingredients and amounts thereof in the emulsions and processes of Frings because they are encompassed by Frings and would have been expected to give the emulsions and properties thereof of the emulsions of Frings.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Friday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Patrick D Niland/  
Primary Examiner  
Art Unit 1796